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Annex for BT

Test Report No.: CTL2412232073-WF01

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1. Bandwidth

1.1 Test Result

1.1.1 OBW

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	99% Occupied Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.839	/	Pass
		2441	DH5	1	0.844	/	Pass
		2480	DH5	1	0.841	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.174	/	Pass
		2441	2DH5	1	1.178	/	Pass
		2480	2DH5	1	1.180	/	Pass

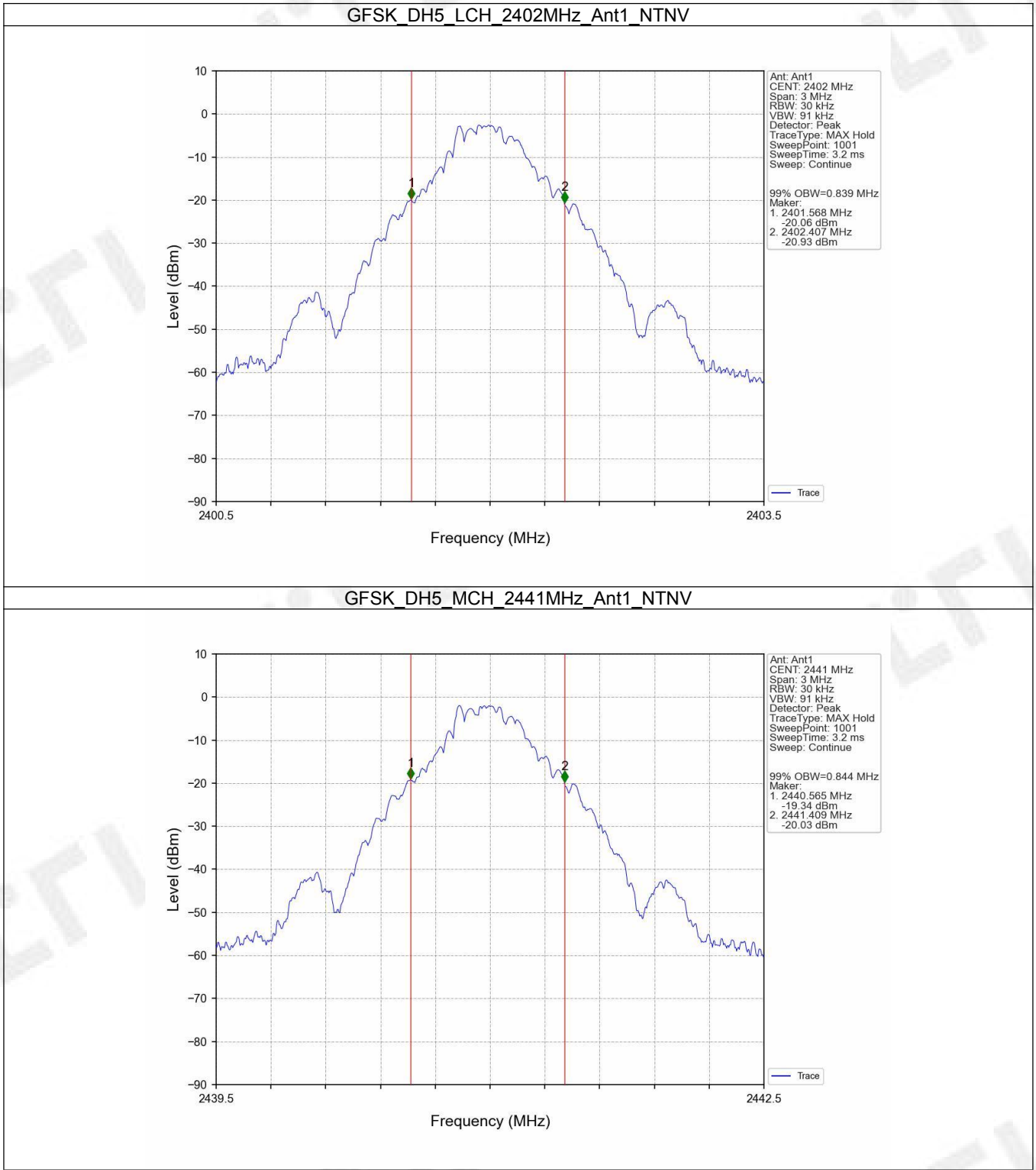
1.1.2 20dB BW

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	20dB Bandwidth (MHz)		Verdict
					Result	Limit	
GFSK	SISO	2402	DH5	1	0.951	/	Pass
		2441	DH5	1	0.952	/	Pass
		2480	DH5	1	0.956	/	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	1.312	/	Pass
		2441	2DH5	1	1.315	/	Pass
		2480	2DH5	1	1.324	/	Pass

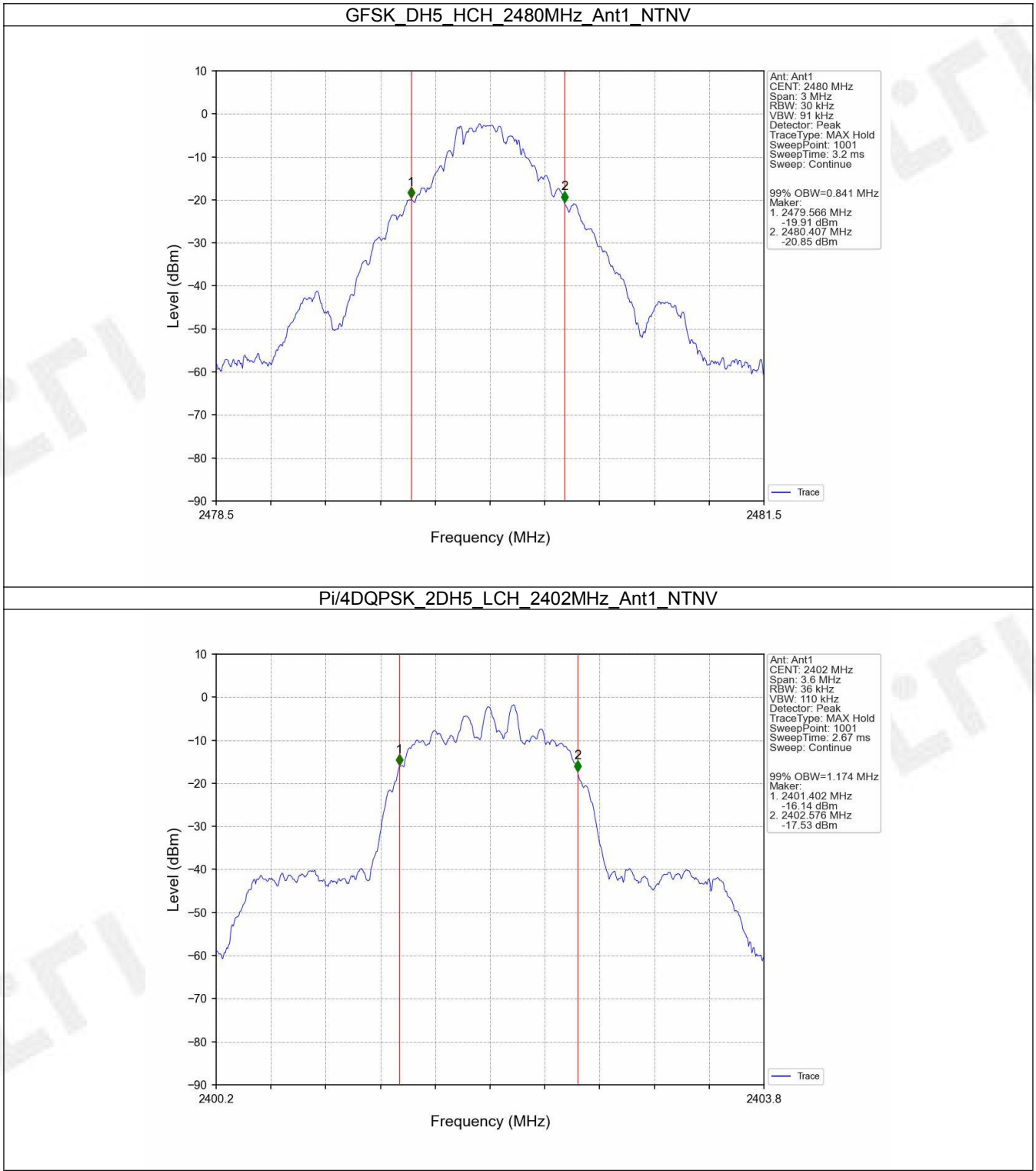
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1.2 Test Graph

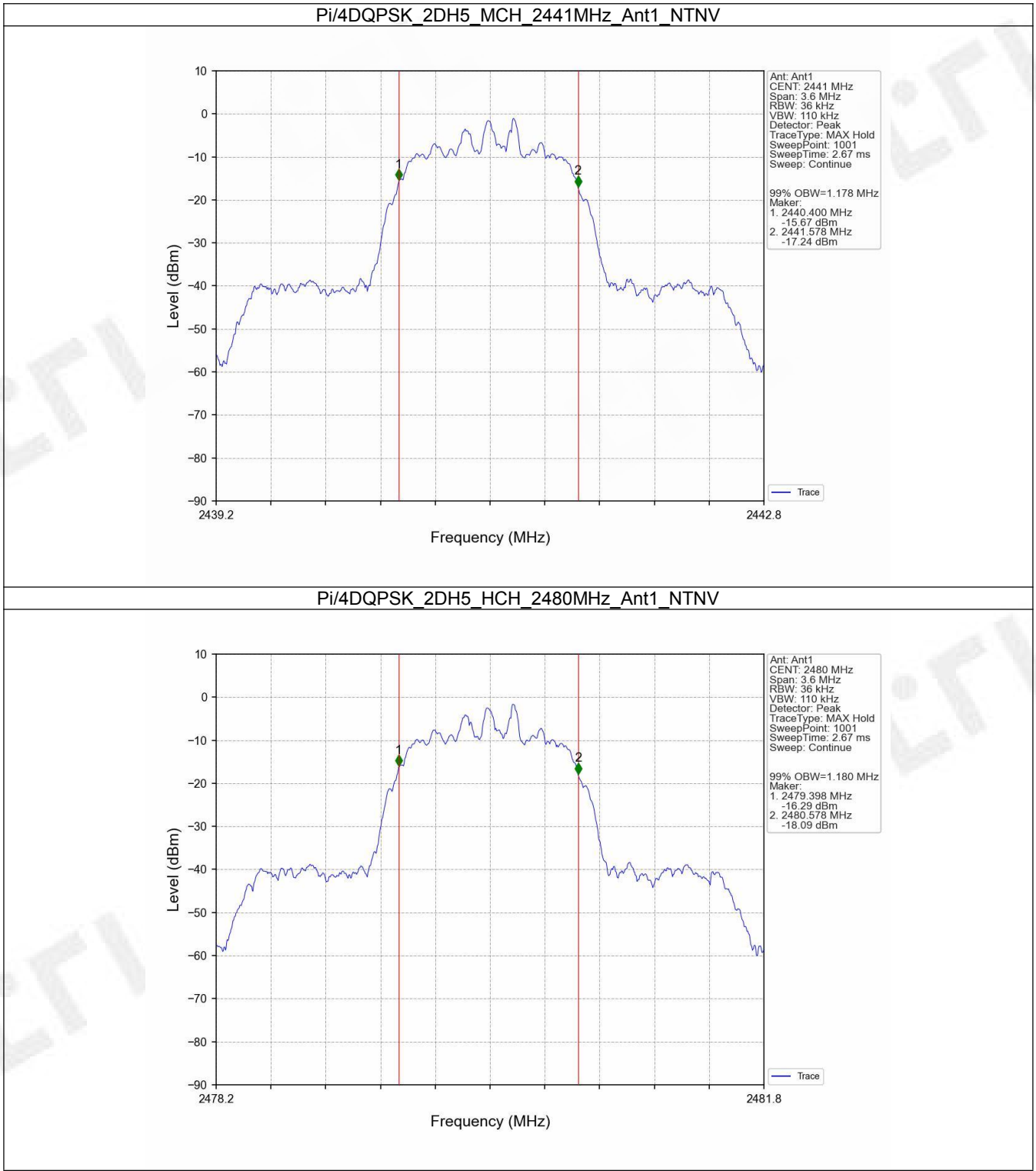
1.2.1 OBW



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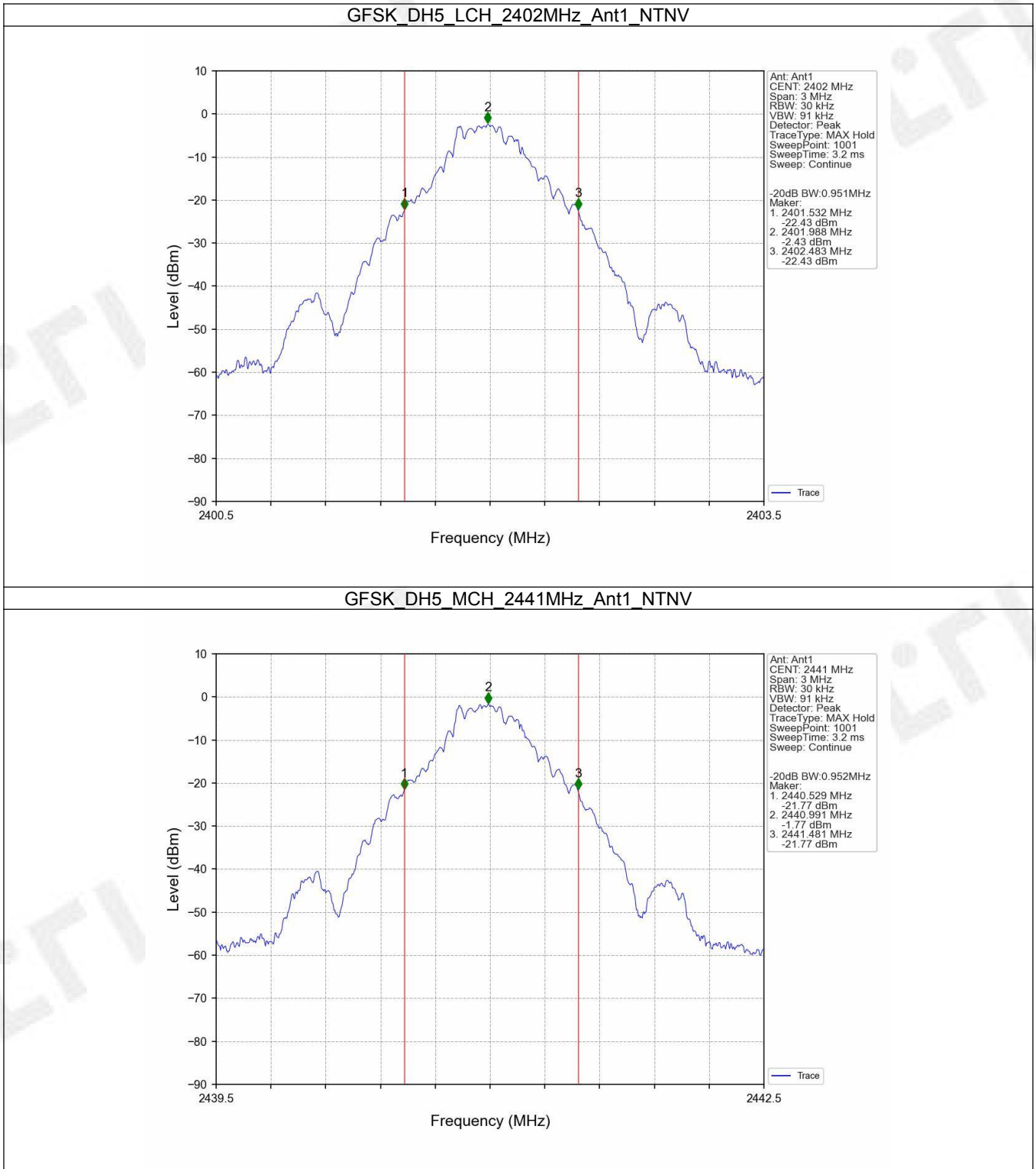


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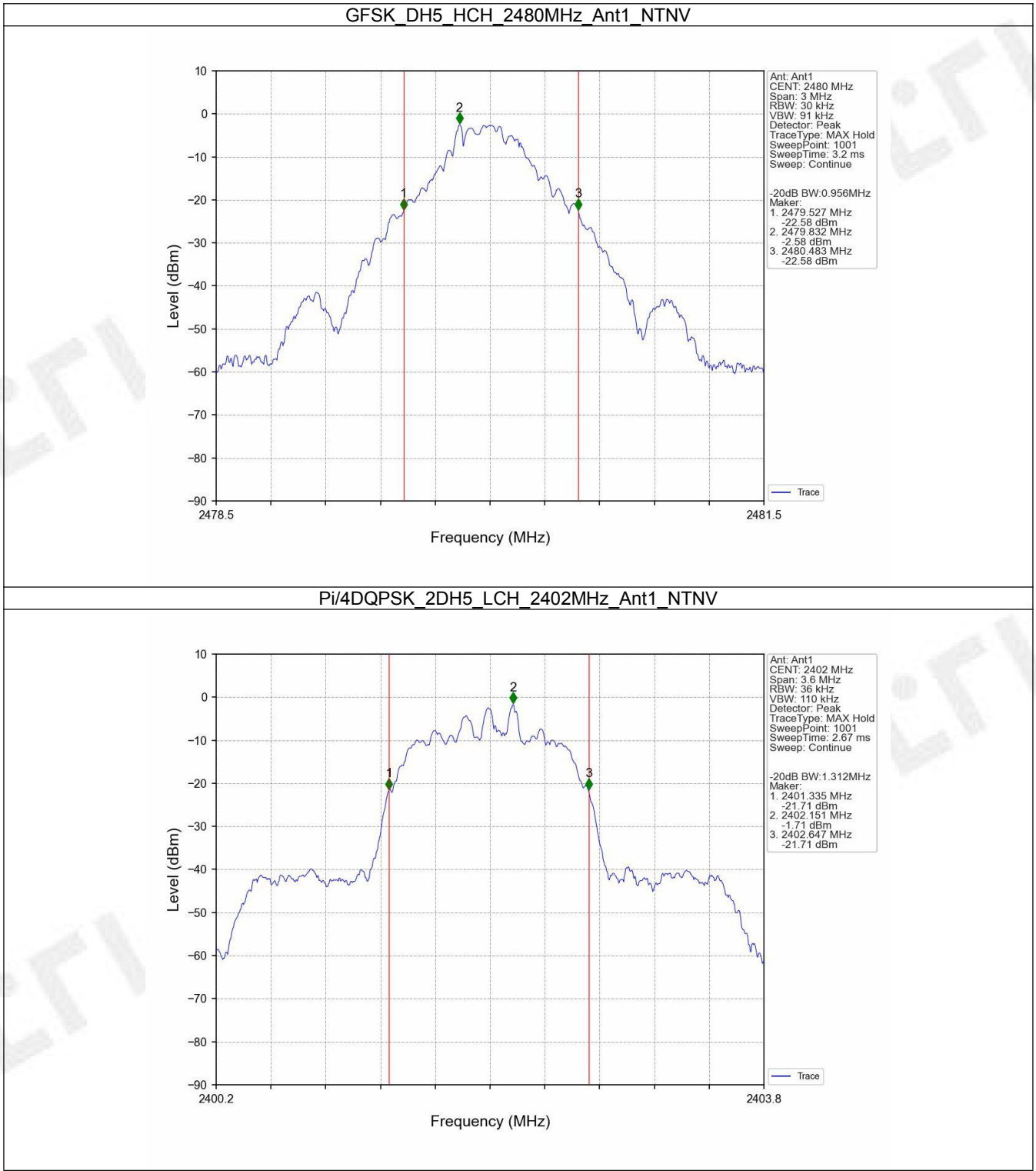


FCCID: 2BOA5-ETA100

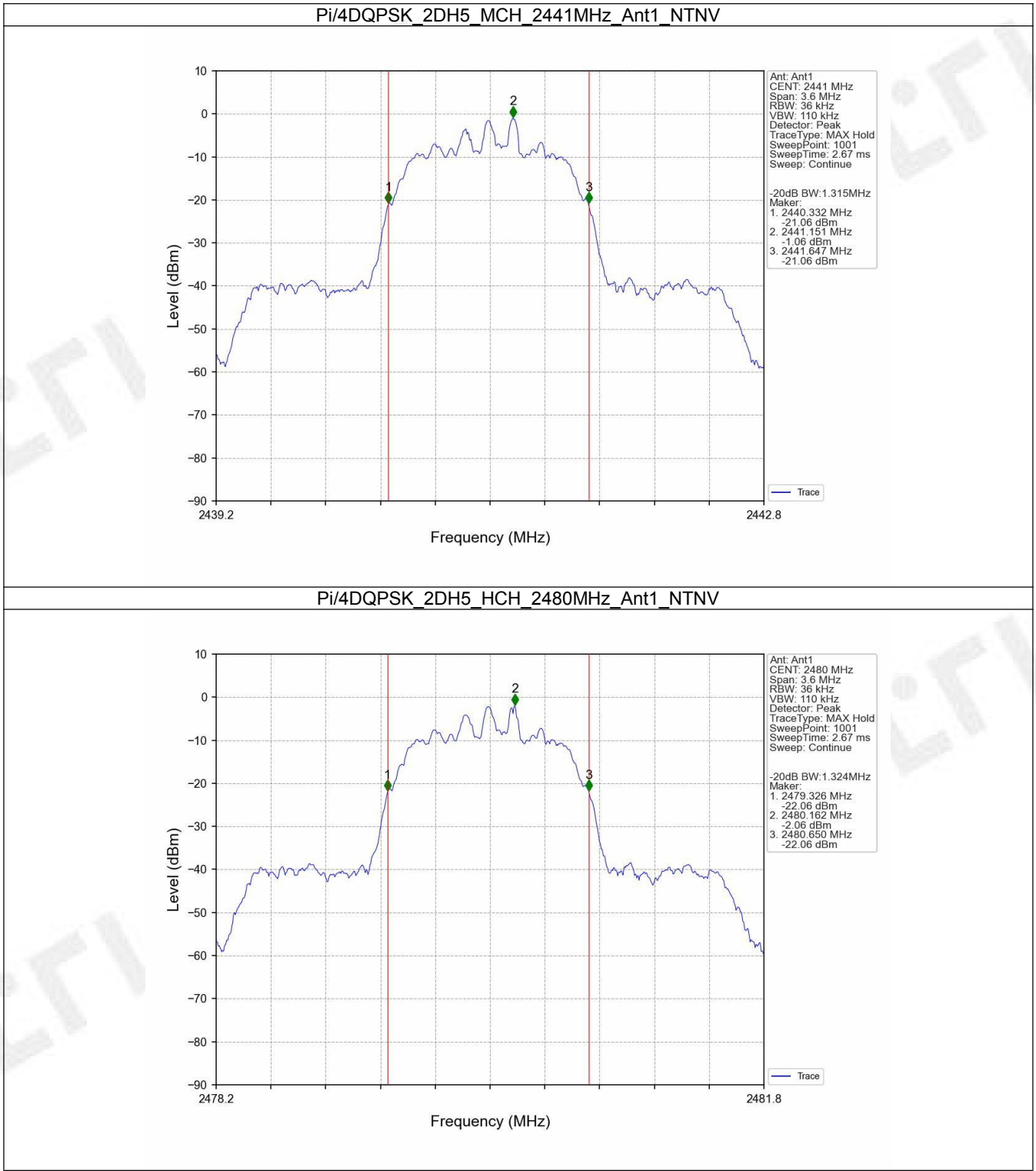
1.2.2 20dB BW



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2. Maximum Conducted Output Power

2.1 Test Result

2.1.1 Power

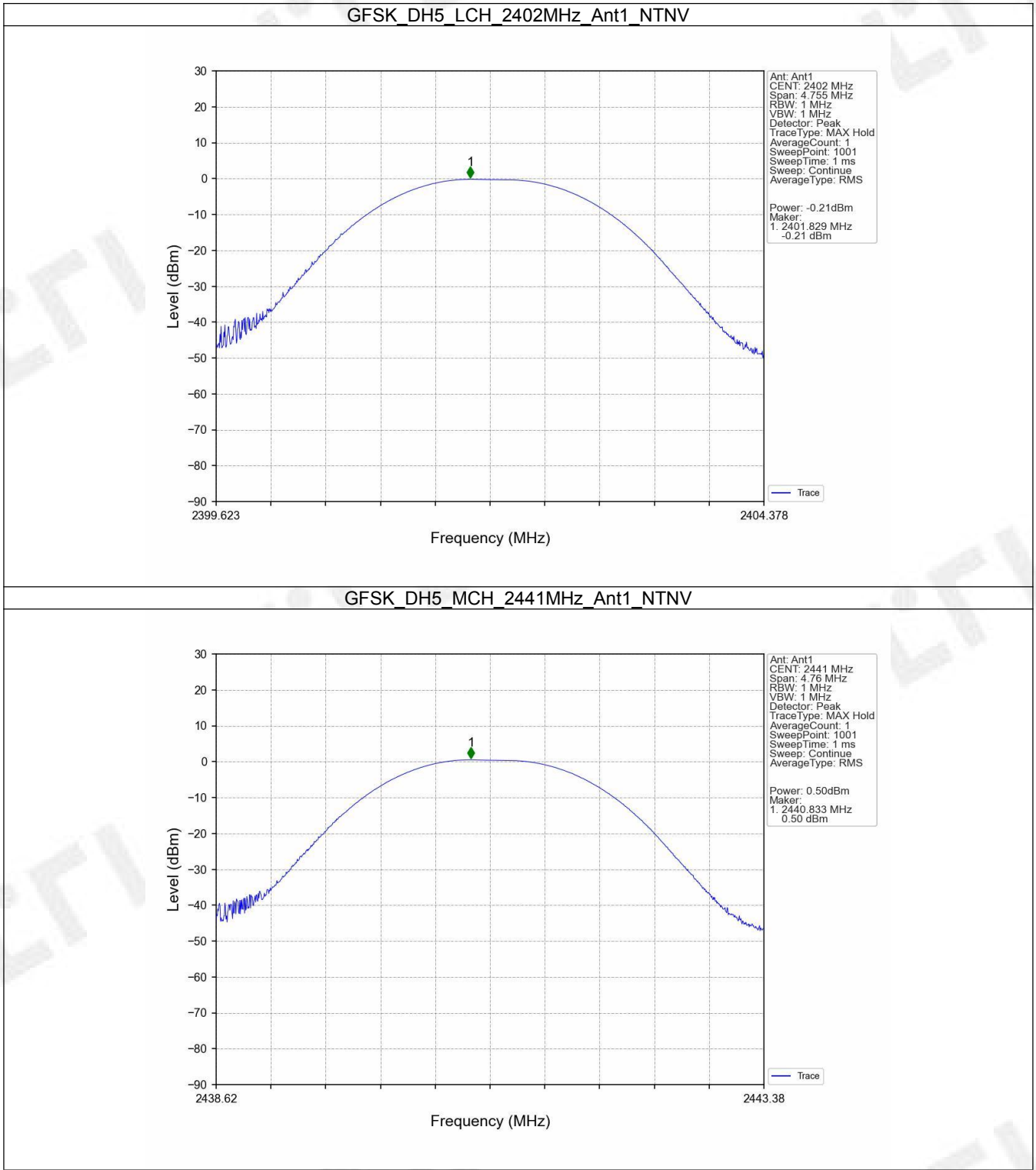
Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)		Verdict
				ANT1	Limit	
GFSK	SISO	2402	DH5	-0.21	<=30	Pass
		2441	DH5	0.50	<=30	Pass
		2480	DH5	-0.09	<=30	Pass
Pi/4DQPSK	SISO	2402	2DH5	0.53	<=20.97	Pass
		2441	2DH5	1.21	<=20.97	Pass
		2480	2DH5	0.61	<=20.97	Pass

Note1: Antenna Gain: Ant1: -0.58dBi;

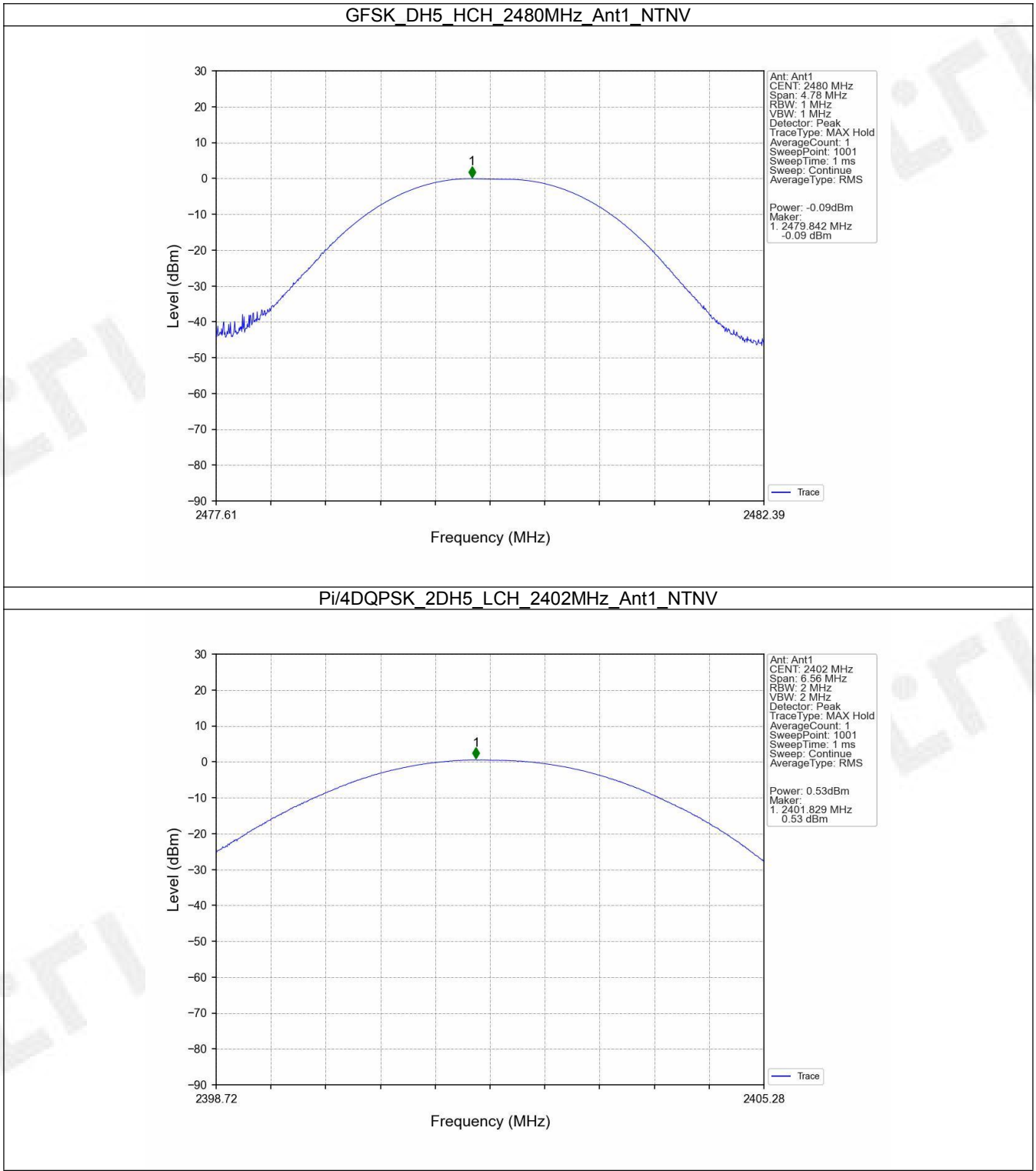
FCCID: 2BOA5-ETA100

2.2 Test Graph

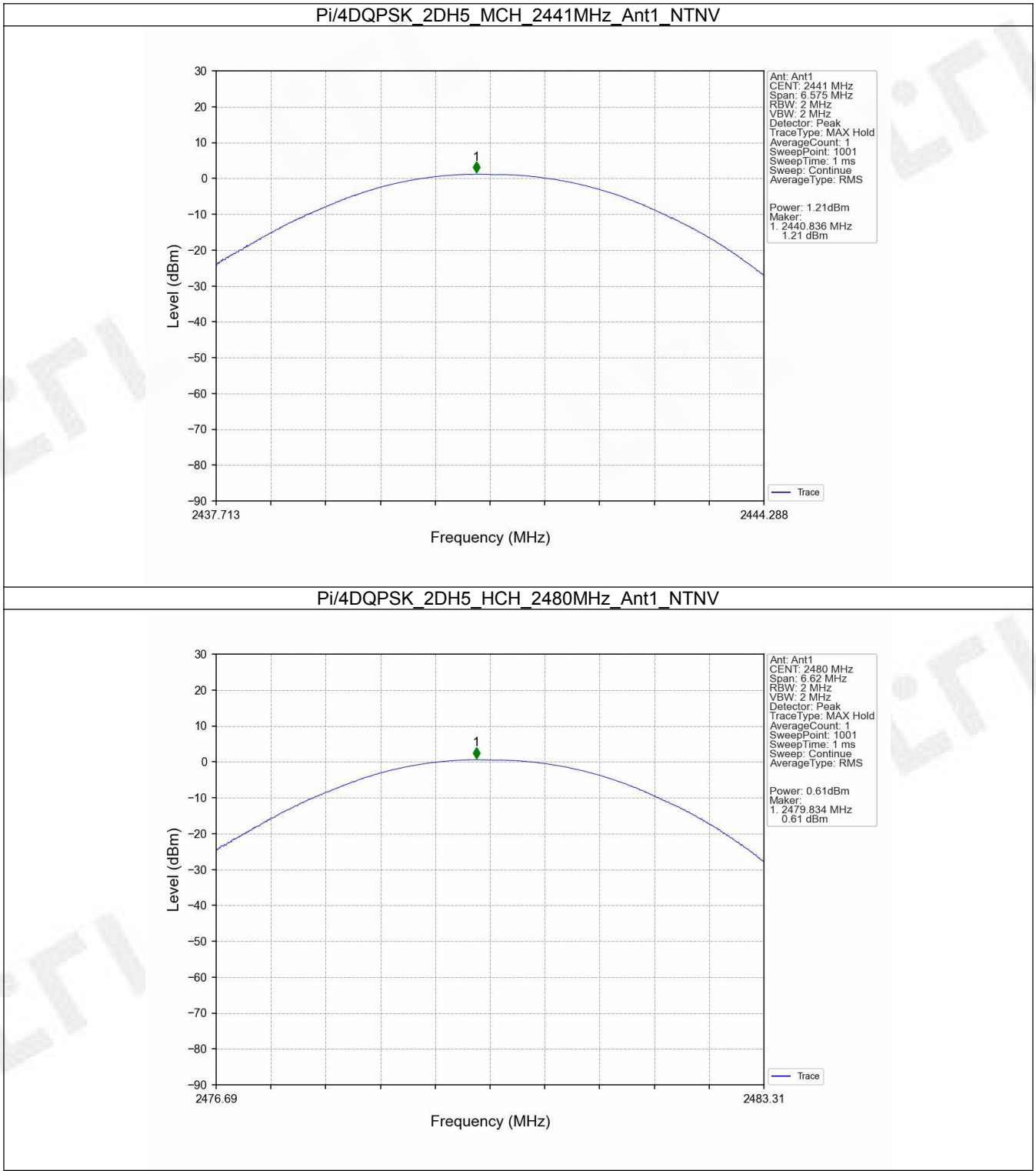
2.2.1 Power



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3. Carrier Frequency Separation

3.1 Test Result

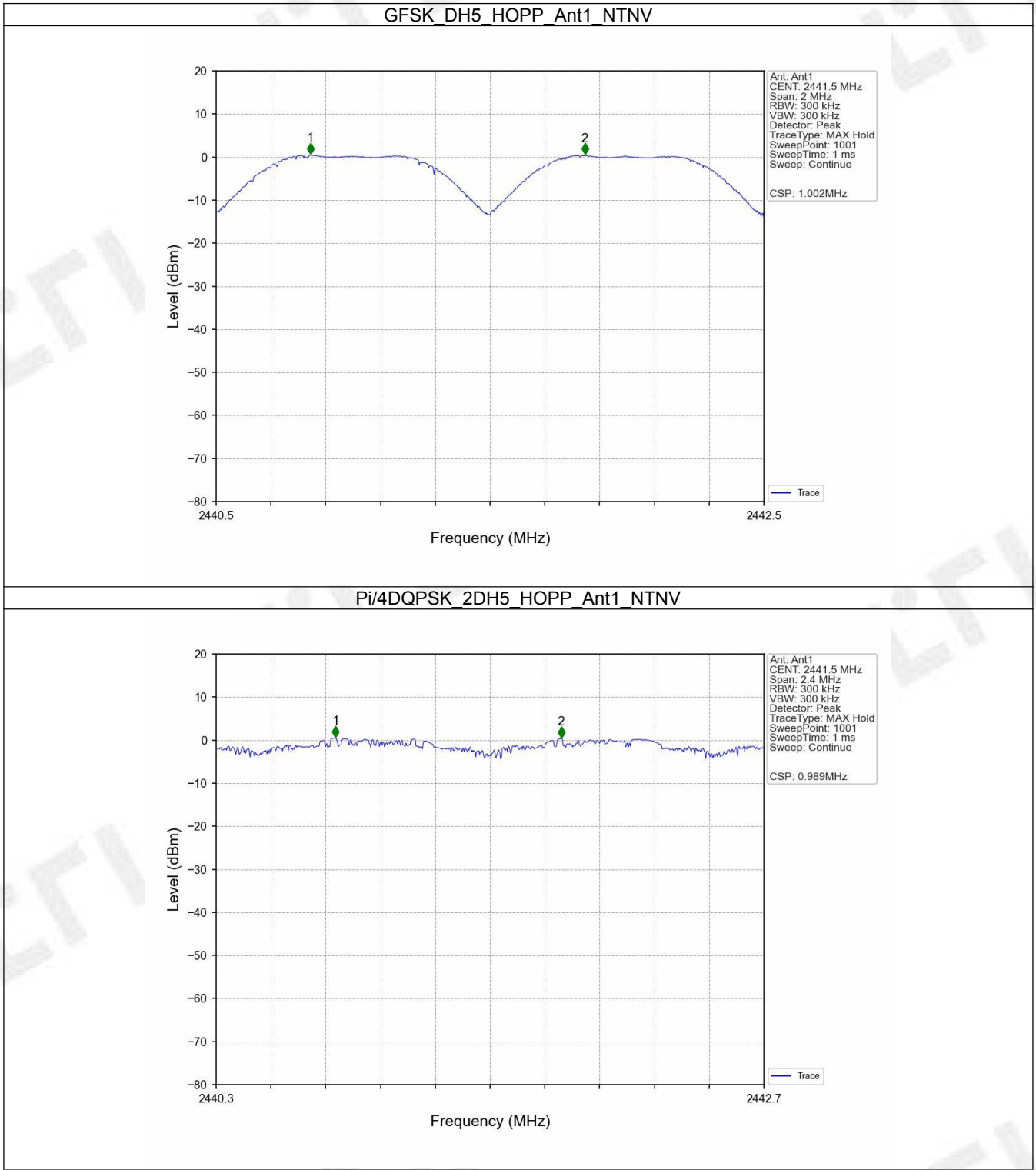
3.1.1 Ant1

Ant1							
Mode	TX Type	Frequency (MHz)	Packet Type	Channel Separation (MHz)	20dB Bandwidth (MHz)	Limit (MHz)	Verdict
GFSK	SISO	HOPP	DH5	1.002	0.956	≥ 0.956	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	0.989	1.324	≥ 0.883	Pass

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3.2 Test Graph

3.2.1 Ant1



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4. Number of Hopping Frequencies

4.1 Test Result

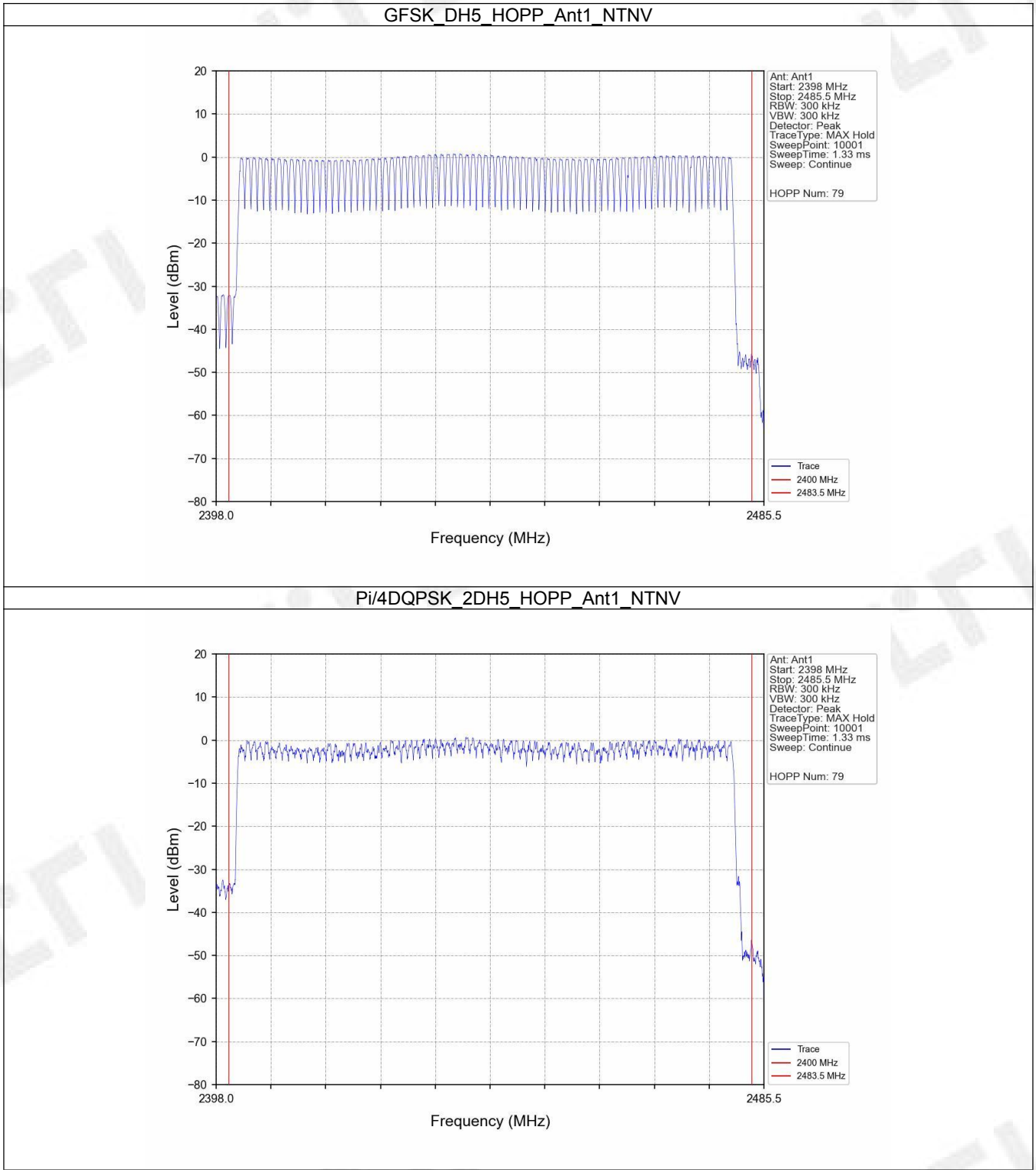
4.1.1 HoppNum

Mode	TX Type	Frequency (MHz)	Packet Type	Num of Hopping Frequencies		Verdict
				ANT1	Limit	
GFSK	SISO	HOPP	DH5	79	>=15	Pass
Pi/4DQPSK	SISO	HOPP	2DH5	79	>=15	Pass

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4.2 Test Graph

4.2.1 HoppNum



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5. Time of Occupancy (Dwell Time)

5.1 Test Result

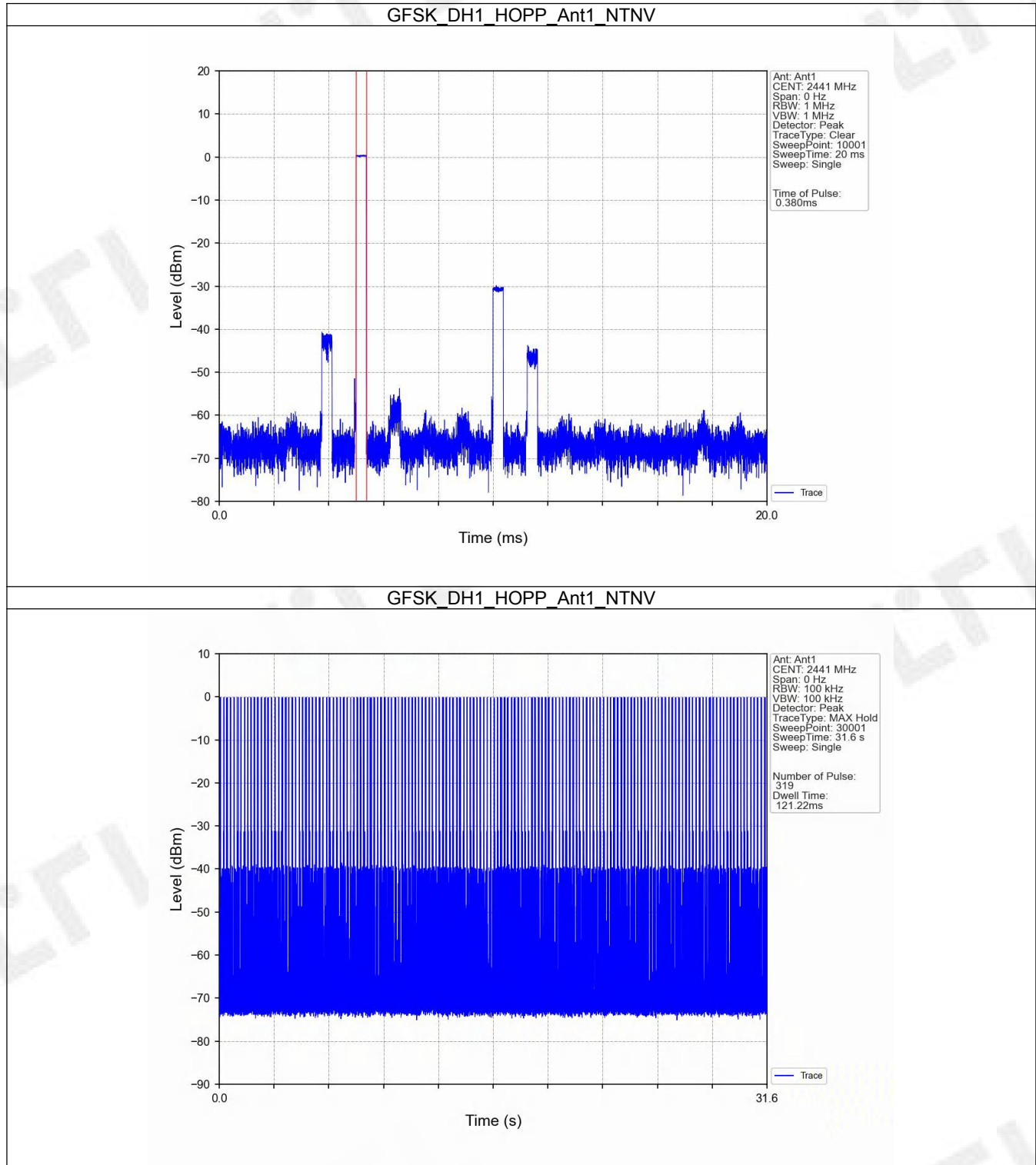
5.1.1 Ant1

Ant1									
Mode	TX Type	Frequency (MHz)	Packet Type	Duration of Single Pulse (ms)	Observation Period (s)	Num of Pulse in Observation Period	Dwell Time (ms)	Limit (ms)	Verdict
GFSK	SISO	HOPP	DH1	0.380	31.600	319	121.220	<=400	Pass
			DH3	1.638	31.600	89	145.782	<=400	Pass
			DH5	2.884	31.600	70	201.880	<=400	Pass
Pi/4DQPSK	SISO	HOPP	2DH1	0.390	31.600	319	124.410	<=400	Pass
			2DH3	1.642	31.600	102	167.484	<=400	Pass
			2DH5	2.888	31.600	61	176.168	<=400	Pass

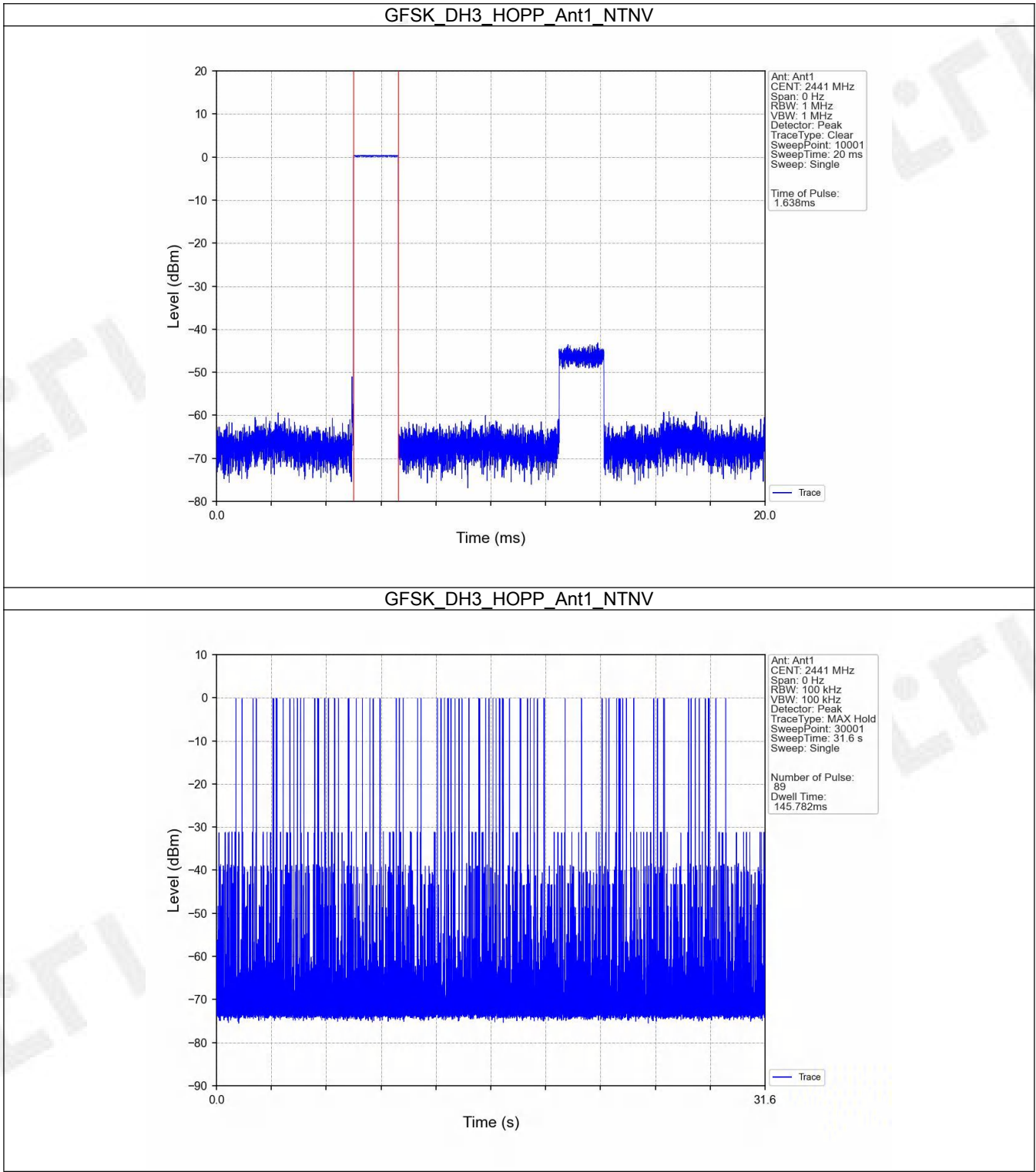
FCCID: 2BOA5-ETA100

5.2 Test Graph

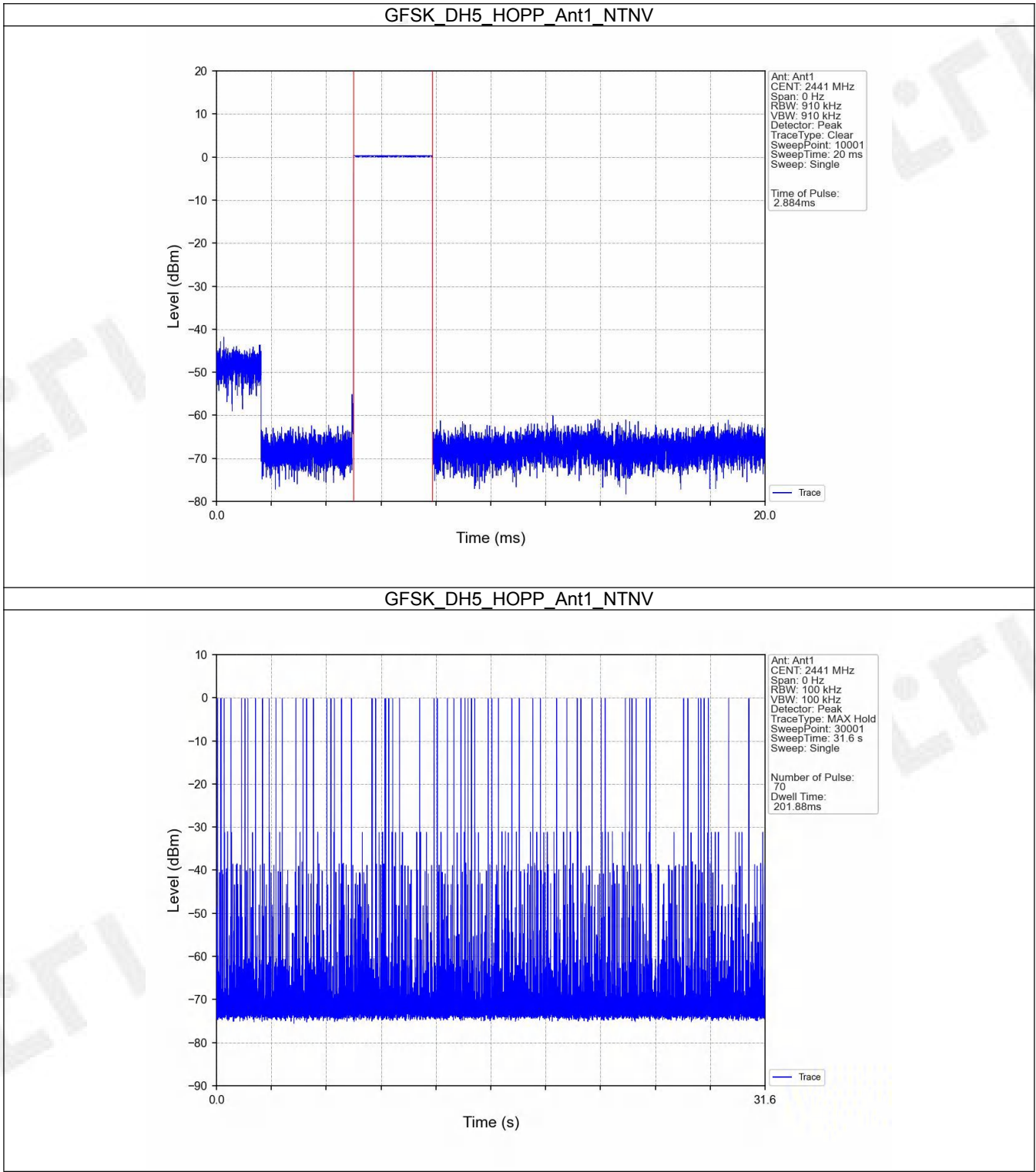
5.2.1 Ant1



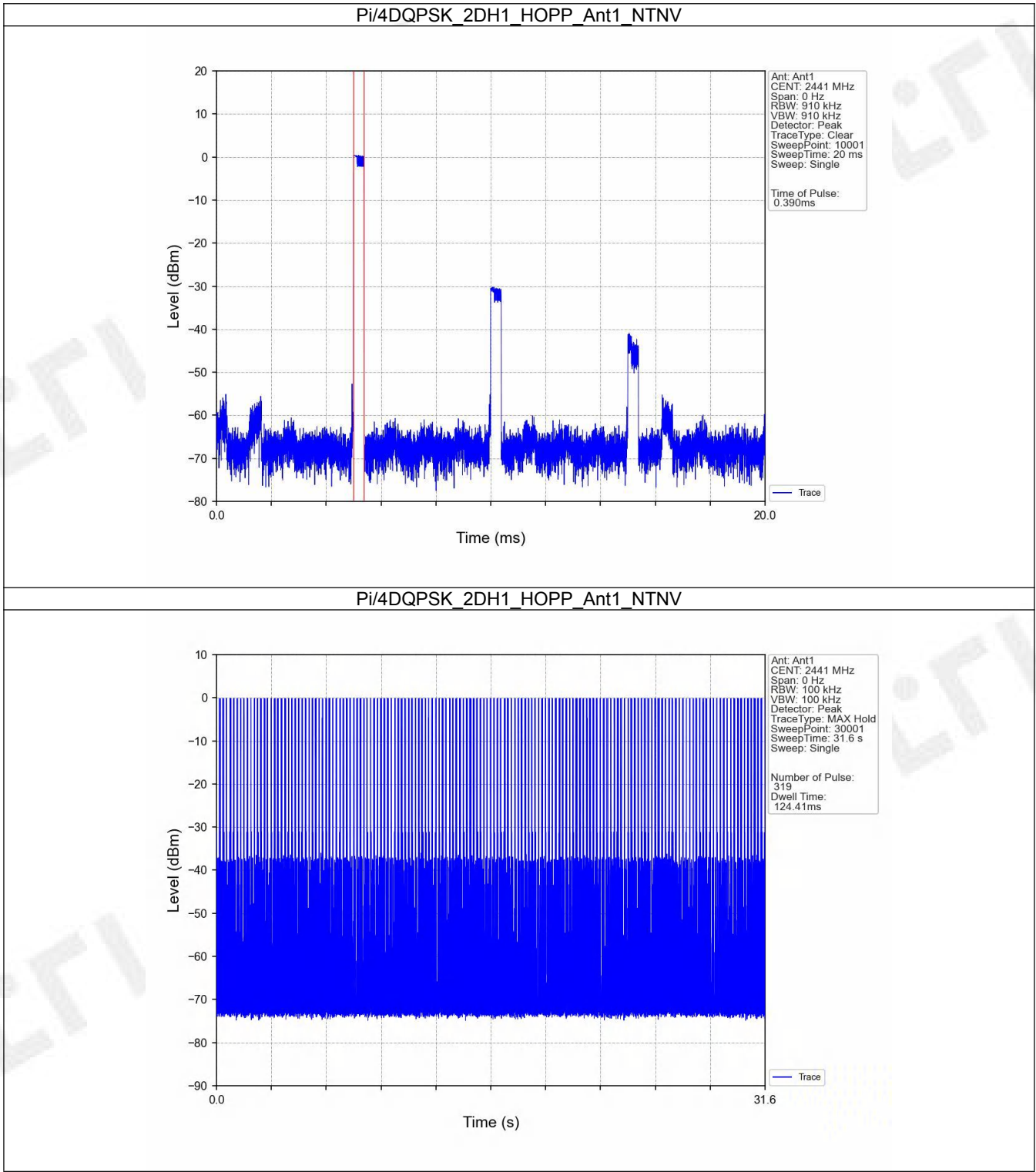
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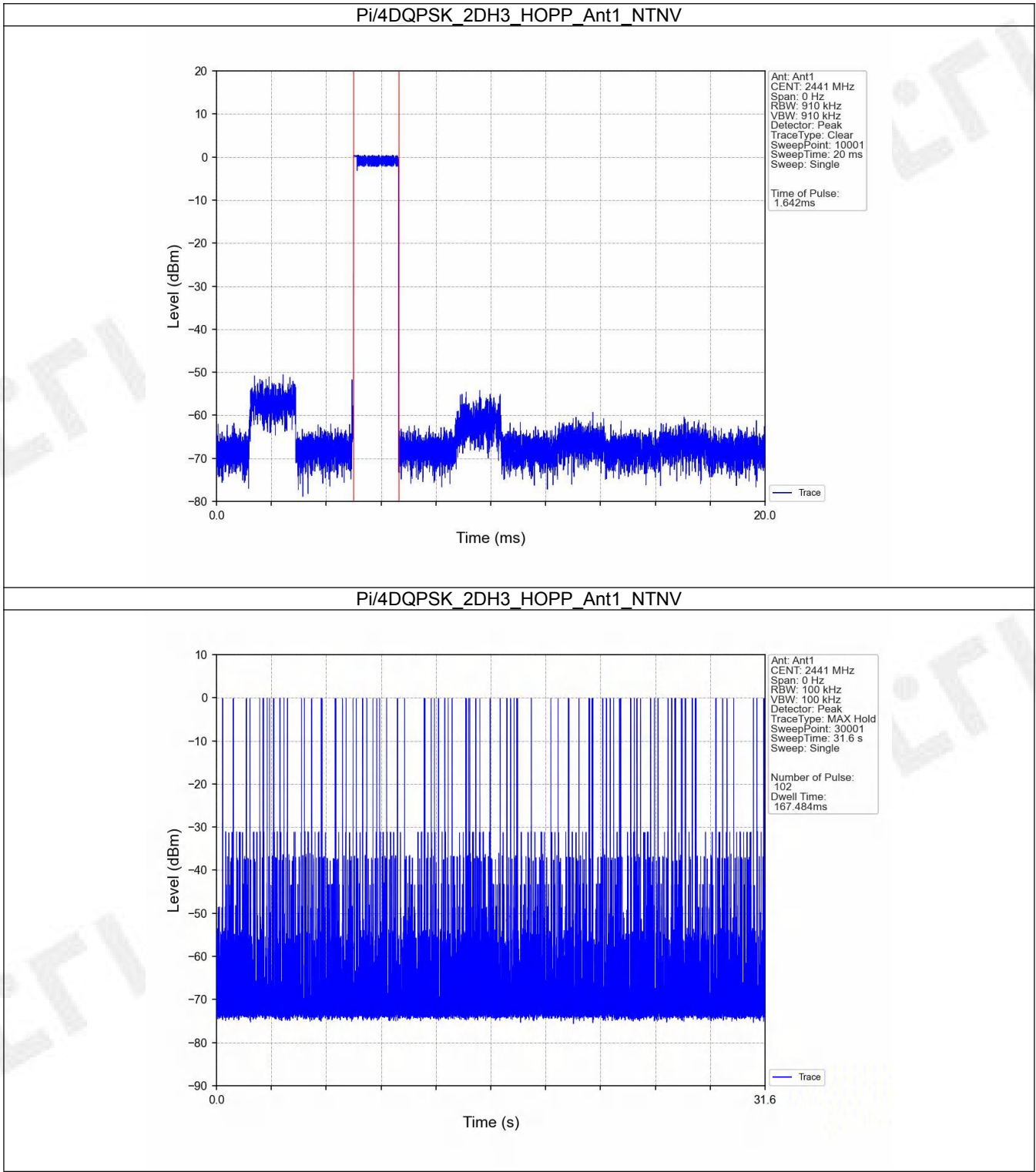
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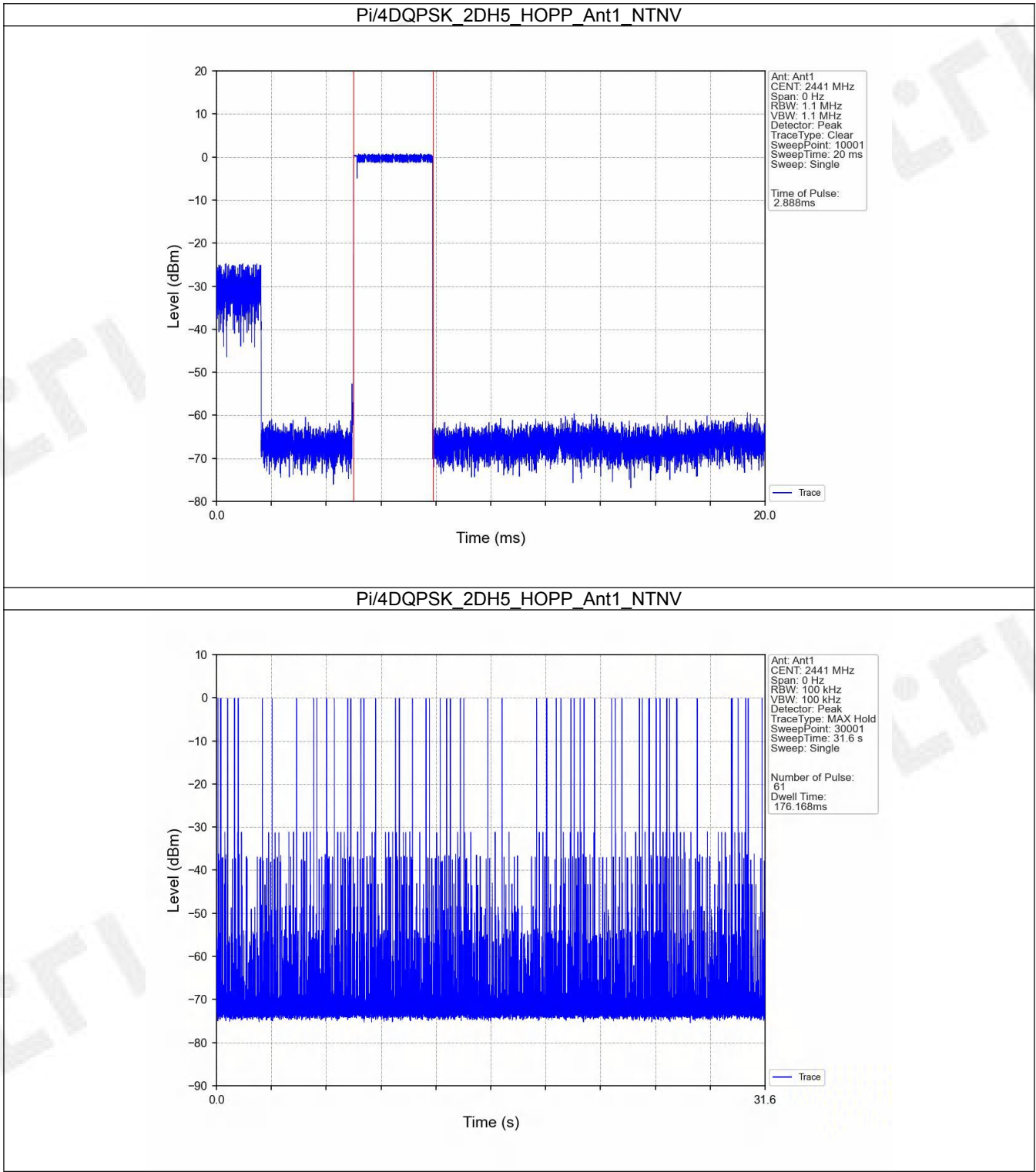
FCCID: 2BOA5-ETA100



FCCID: 2BOA5-ETA100



FCCID: 2BOA5-ETA100



FCCID: 2BOA5-ETA100

6. Unwanted Emissions In Non-restricted Frequency Bands

6.1 Test Result

6.1.1 Ref

Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)
GFSK	SISO	2402	DH5	1	-0.25
		2441	DH5	1	0.43
		2480	DH5	1	-0.13
Pi/4DQPSK	SISO	2402	2DH5	1	-0.42
		2441	2DH5	1	0.35
		2480	2DH5	1	-0.27

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

6.1.2 CSE

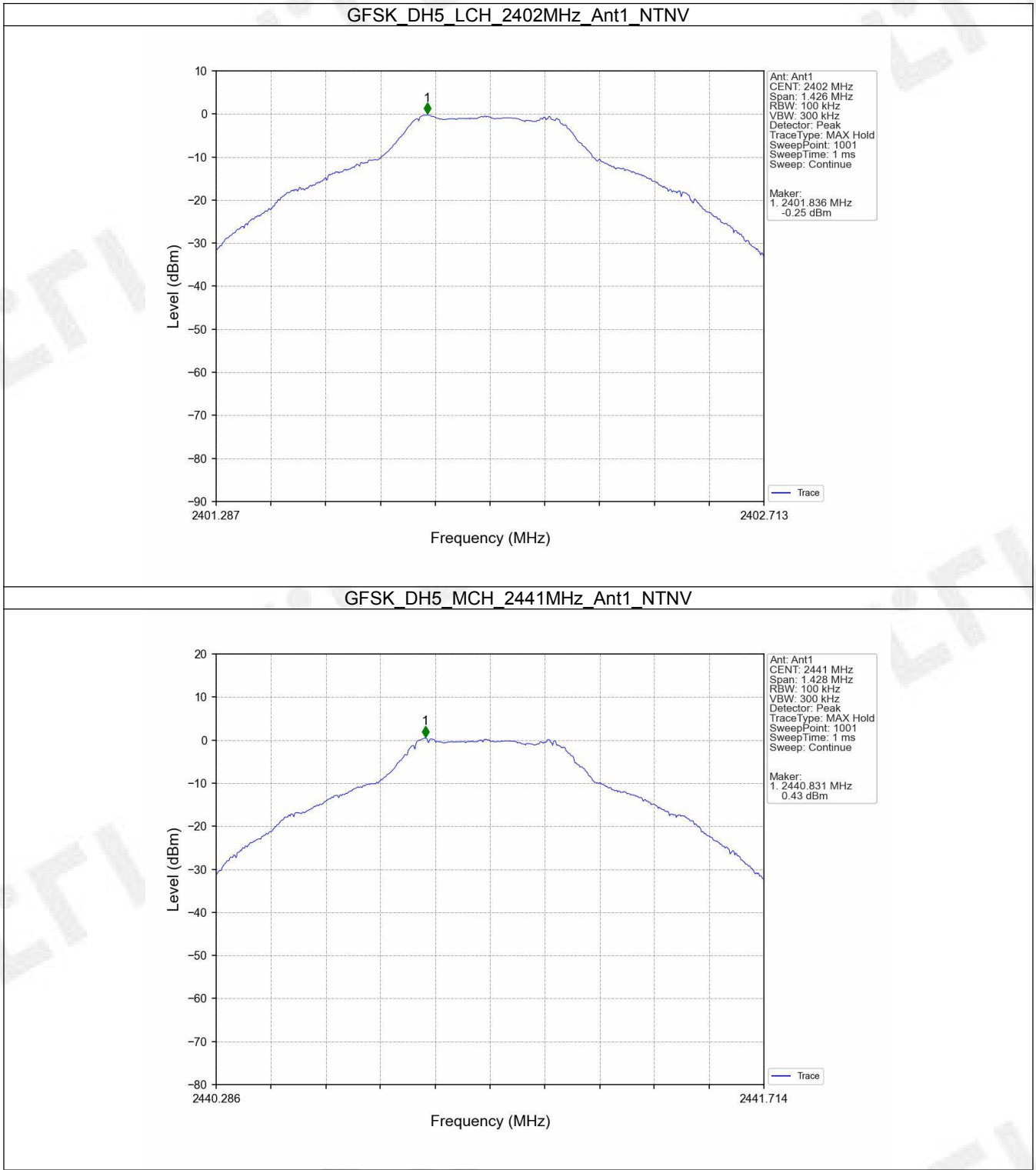
Mode	TX Type	Frequency (MHz)	Packet Type	ANT	Level of Reference (dBm)	Limit (dBm)	Verdict
GFSK	SISO	2402	DH5	1	0.43	-19.57	Pass
		2441	DH5	1	0.43	-19.57	Pass
		2480	DH5	1	0.43	-19.57	Pass
		HOPP	DH5	1	0.43	-19.57	Pass
					0.43	-19.57	Pass
Pi/4DQPSK	SISO	2402	2DH5	1	0.35	-19.65	Pass
		2441	2DH5	1	0.35	-19.65	Pass
		2480	2DH5	1	0.35	-19.65	Pass
		HOPP	2DH5	1	0.35	-19.65	Pass
					0.35	-19.65	Pass

Note1: Refer to FCC Part 15.247 (d) and ANSI C63.10-2013, the channel contains the maximum PSD level was used to establish the reference level.

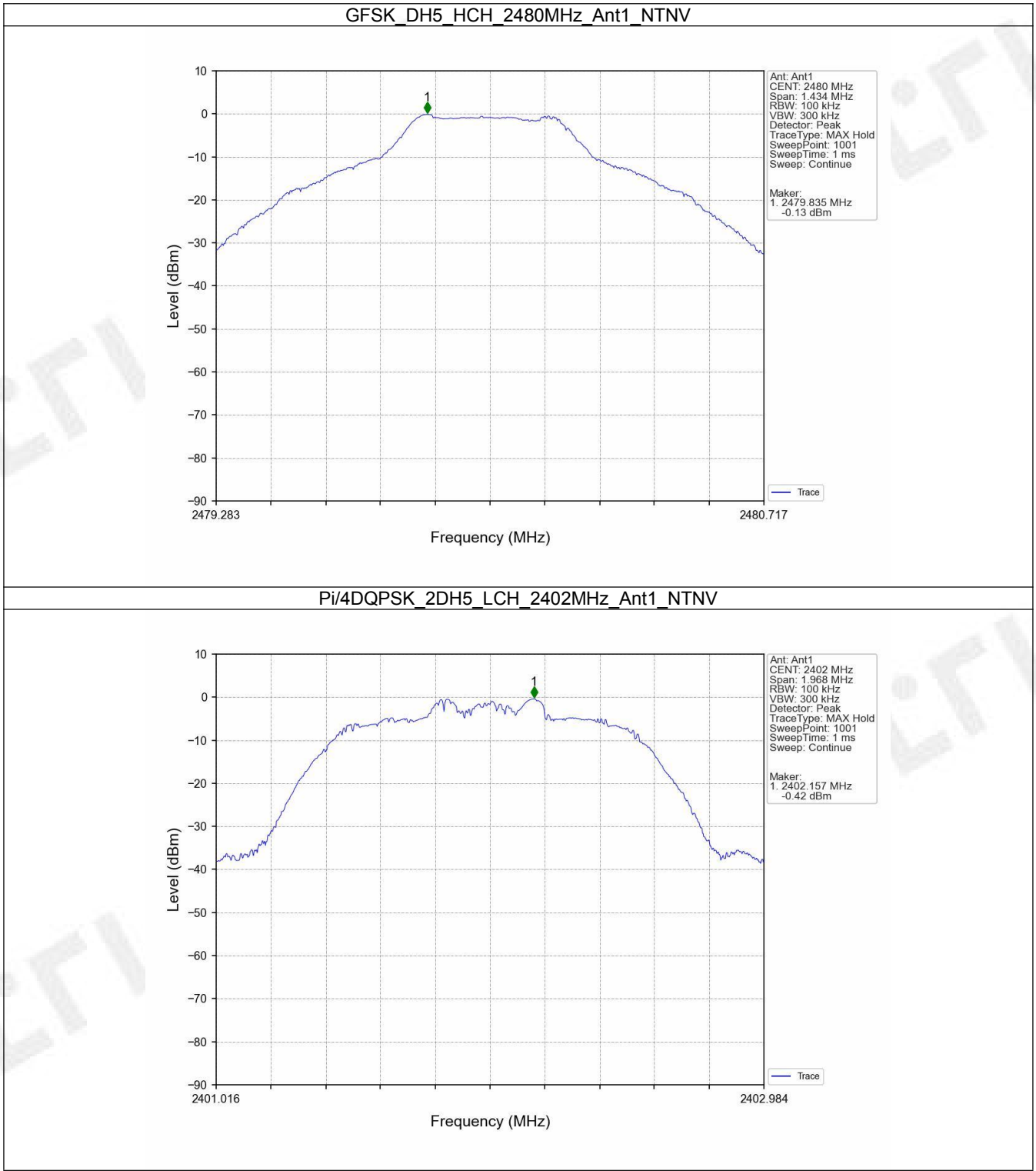
FCCID: 2BOA5-ETA100

6.2 Test Graph

6.2.1 Ref

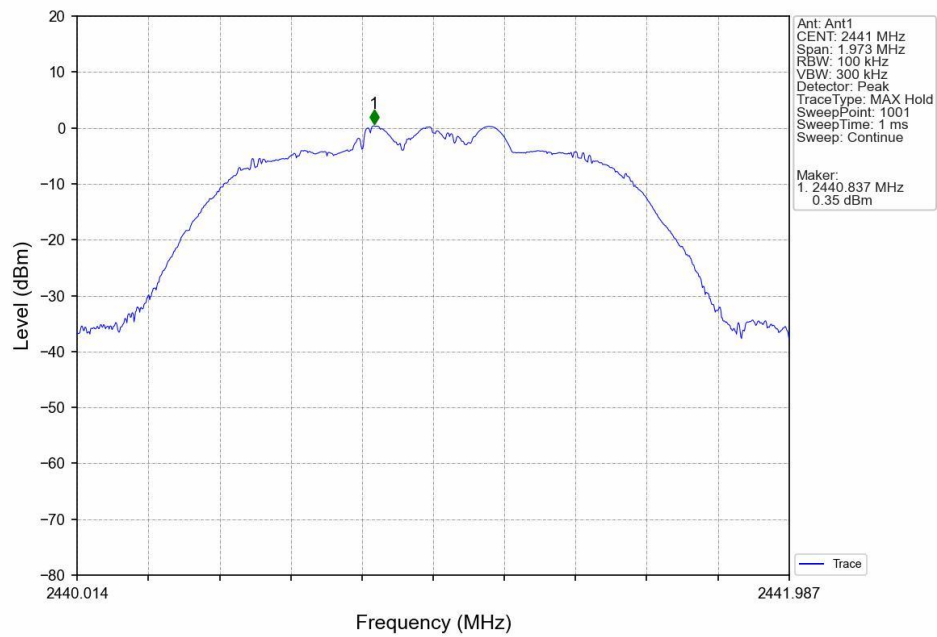


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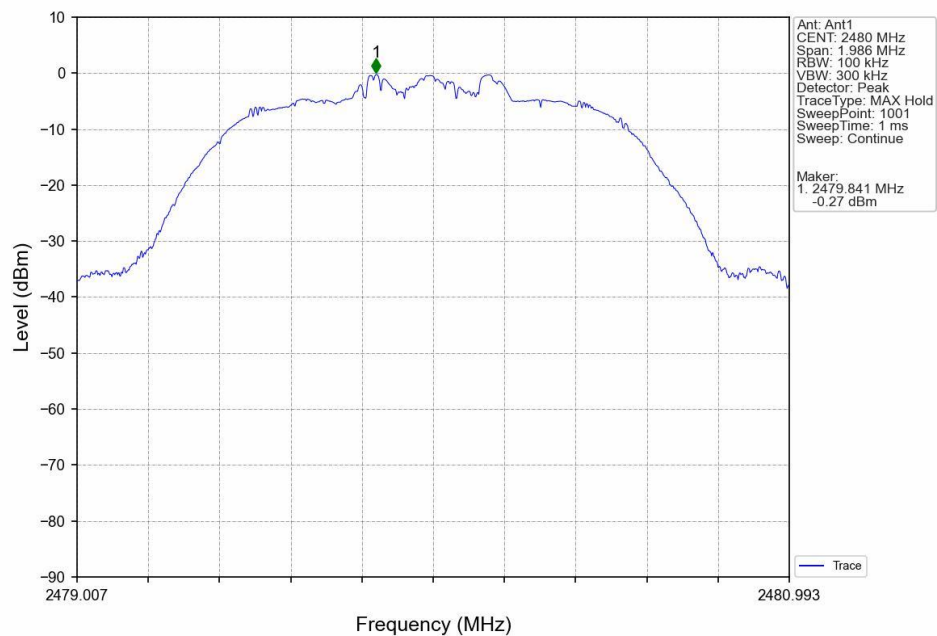


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Pi/4DQPSK_2DH5_MCH_2441MHz_Ant1_NTNV

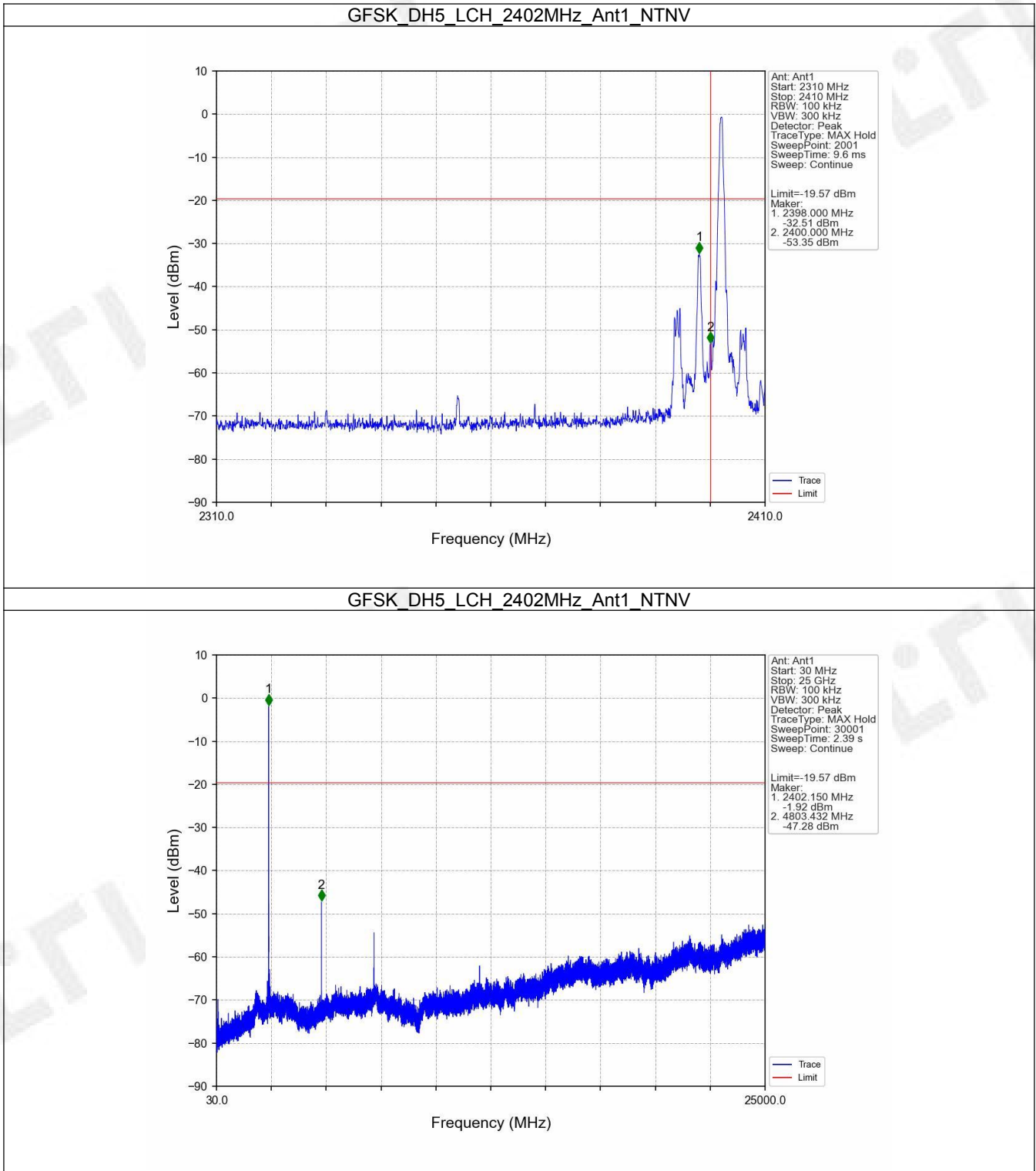


Pi/4DQPSK_2DH5_HCH_2480MHz_Ant1_NTNV

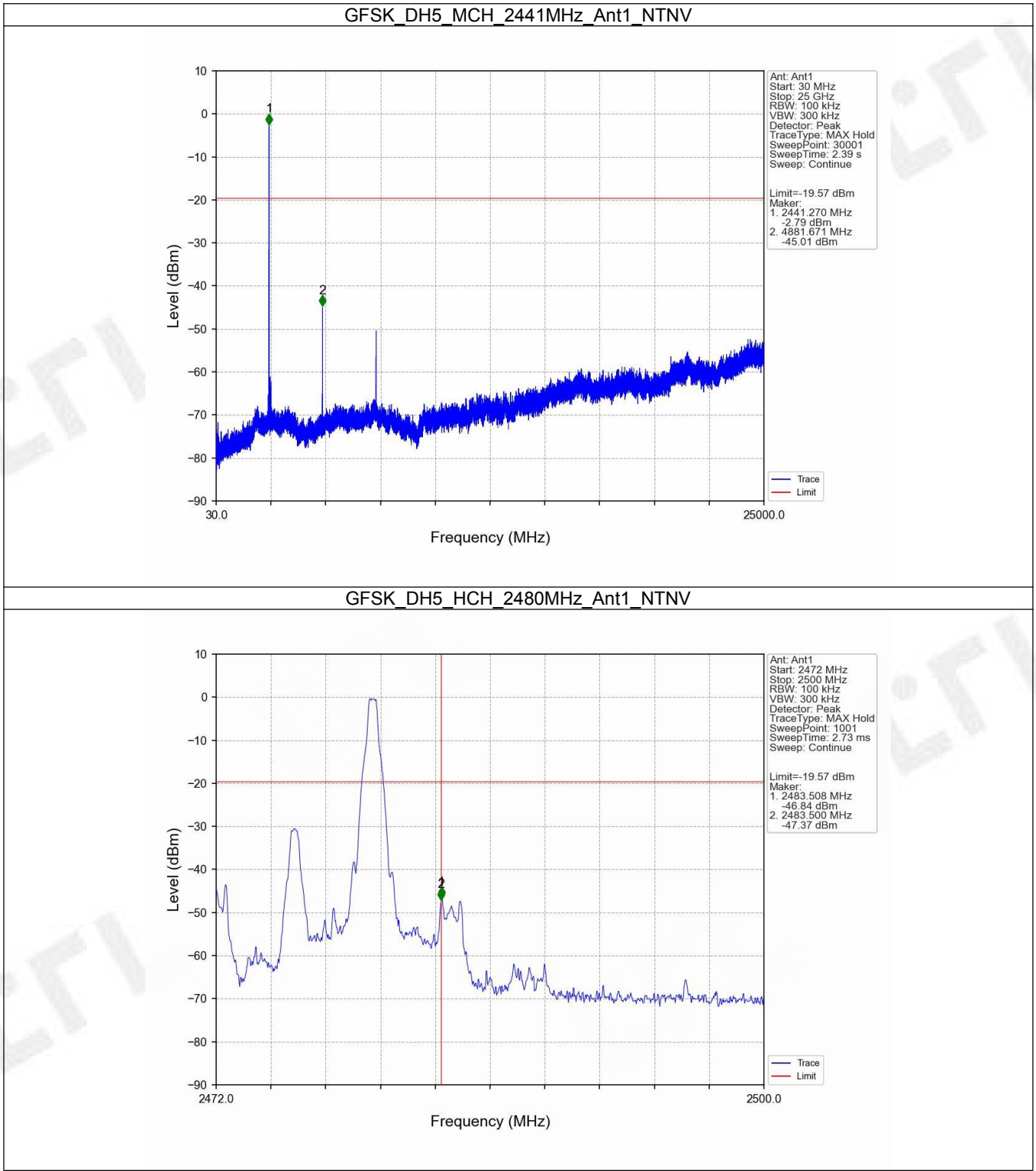


FCCID: 2BOA5-ETA100

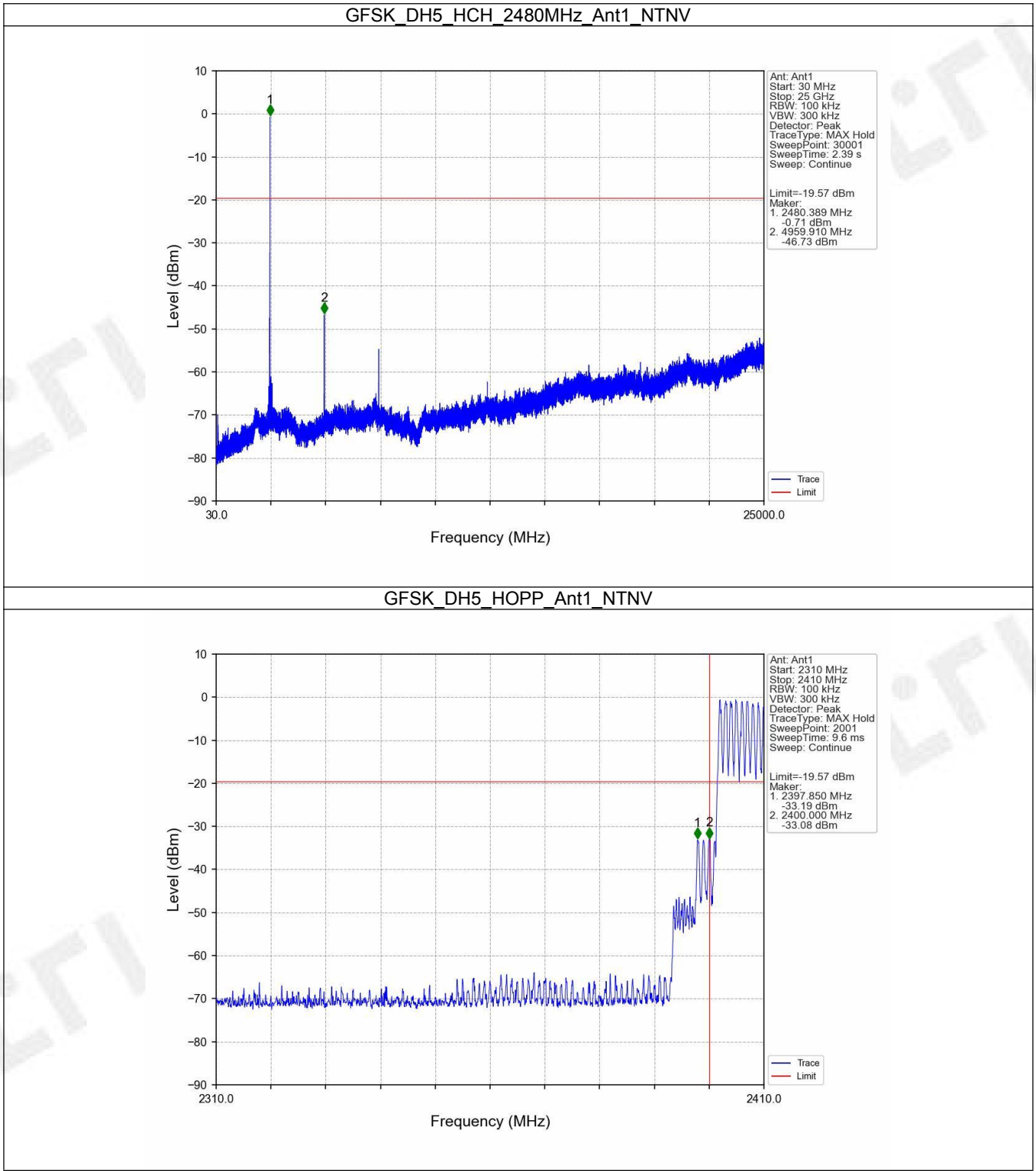
6.2.2 CSE



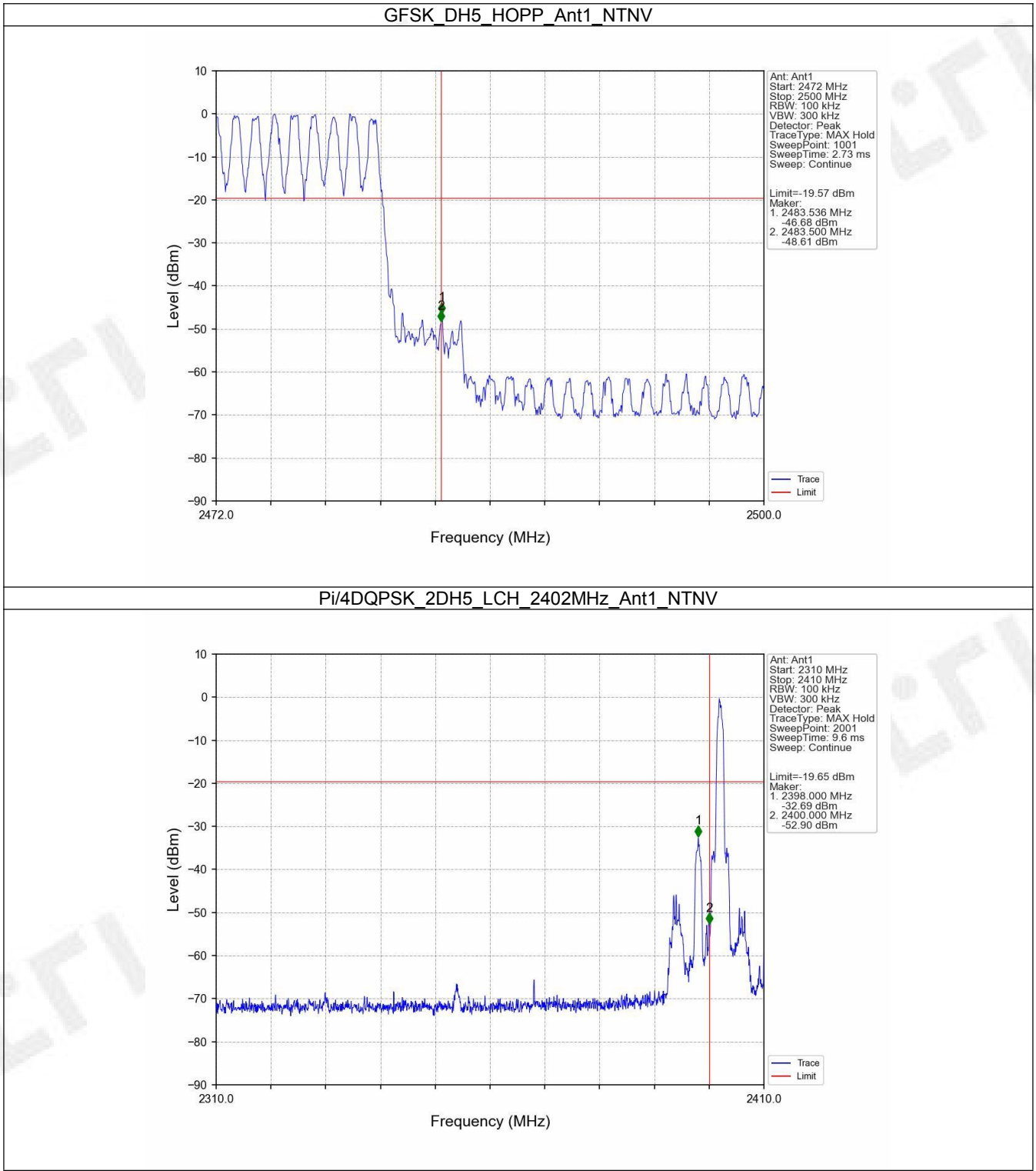
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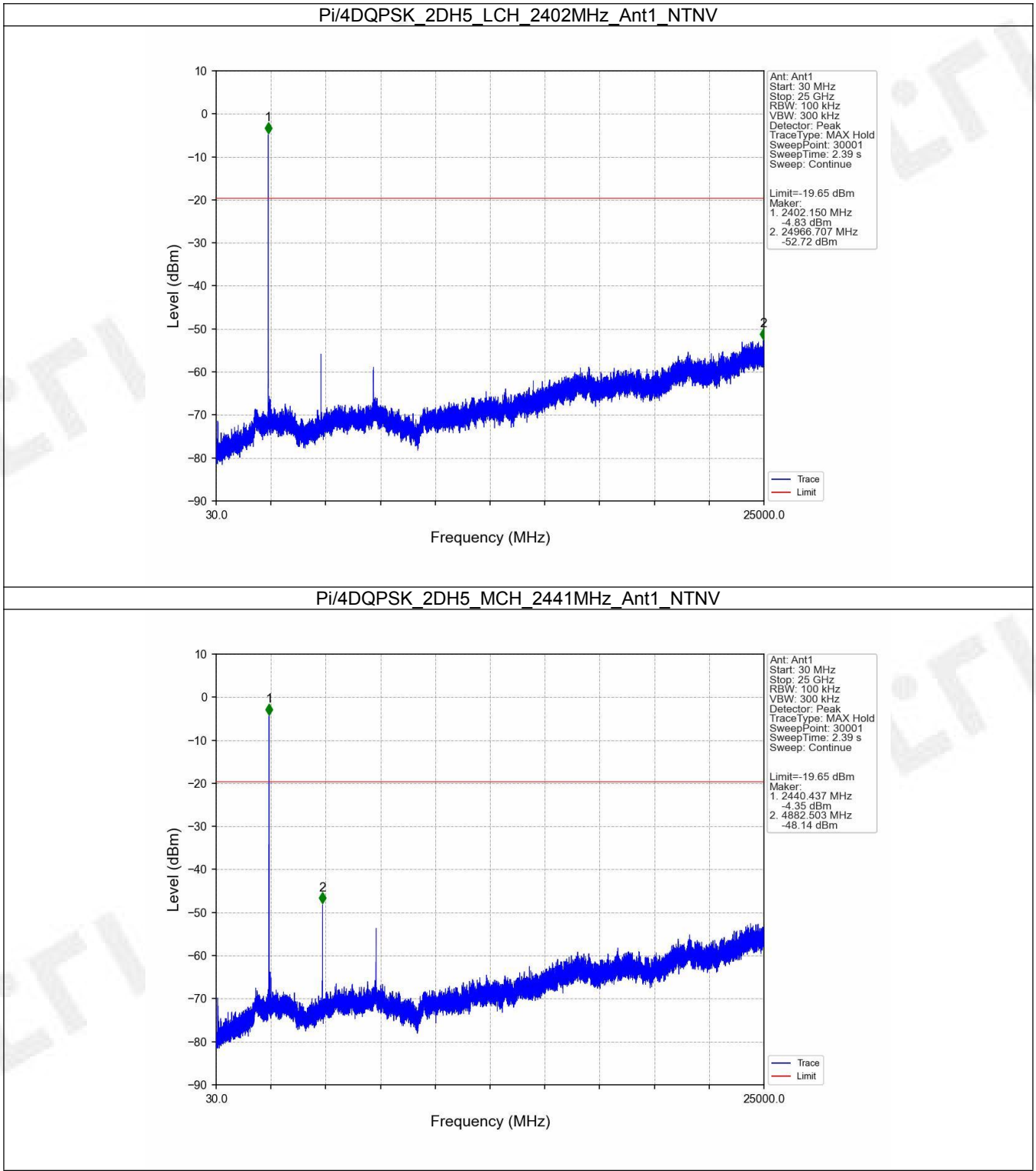
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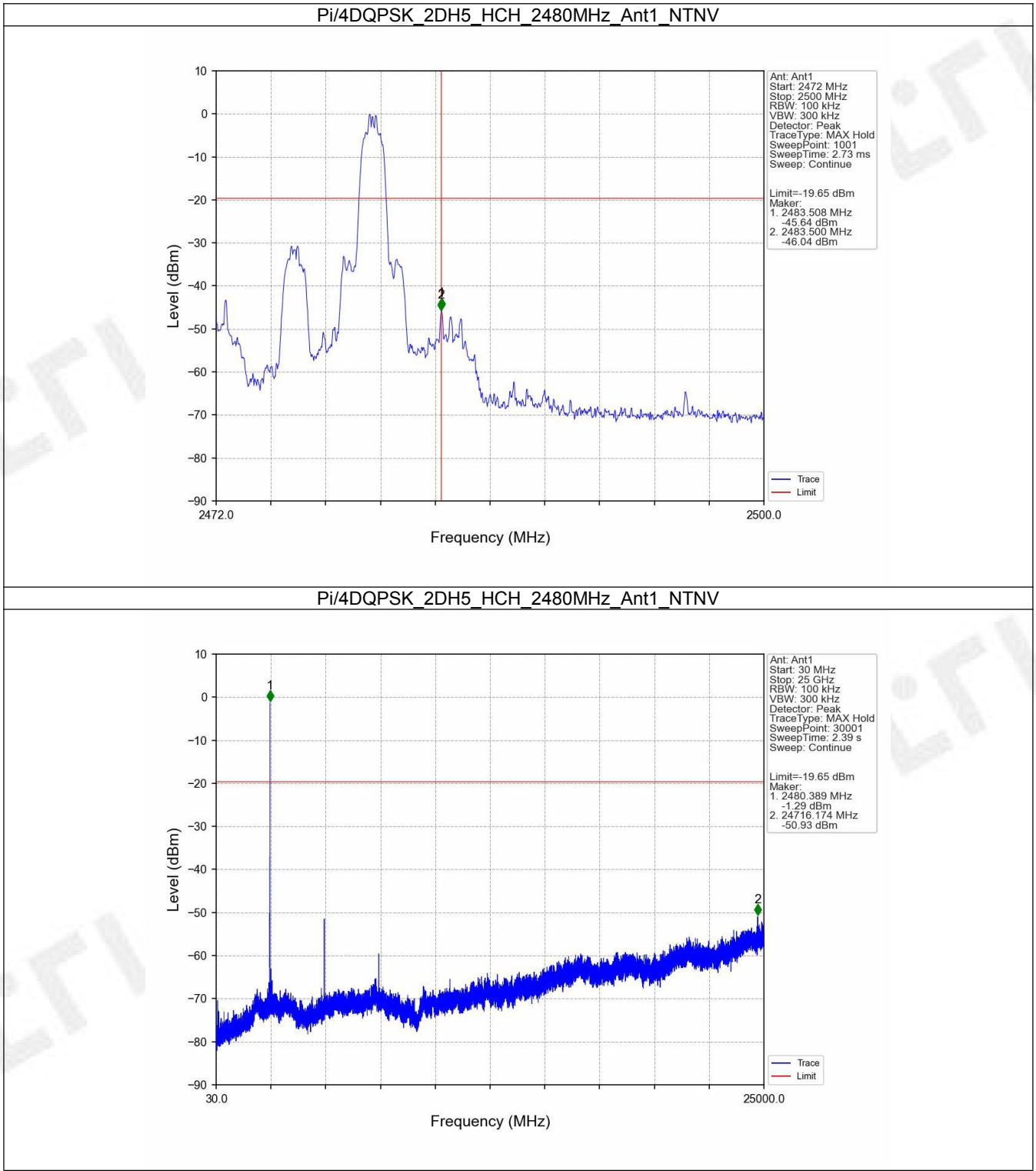
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FCCID: 2BOA5-ETA100



FCCID: 2BOA5-ETA100



FCCID: 2BOA5-ETA100

